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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,717	02/03/2004	Gregory C. Loney	3580.1	2275
22886	7590	06/23/2006		
AFFYMETRIX, INC ATTN: CHIEF IP COUNSEL, LEGAL DEPT. 3420 CENTRAL EXPRESSWAY SANTA CLARA, CA 95051			EXAMINER GEISEL, KARA E	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/770,717

Applicant(s)

LONEY, GREGORY C.

Examiner

Kara E. Geisel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0904, 0305</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

The information disclosure statements filed September 16<sup>th</sup>, 2004 and March 31<sup>st</sup>, 2005, have been considered by the examiner.

### *Drawings*

The drawings are objected to because in fig. 2A, the beam, 230, cannot be seen in the drawing. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Objections*

Claim 25 is objected to because of the following informalities: with regards to line 9, "the second

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detector”, there is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 8-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Hutchison (US Pubs 2002/0190221).

In regards to claim 8, Hutchison discloses a method for providing a wavelength of light (fig. 1), comprising providing a first wavelength (from 26), and emitting a second wavelength (from 22) based, at least in part upon the first wavelength (page 2, ¶ 15), wherein the second wavelength is not the result of a fluorescent emission (page 2, ¶ 13).

In regards to claims 9-11, the first wavelength (from 26) corresponds to a wavelength capable of exciting one or more fluorescent molecules which could be associated with a target molecule in a biological sample (page 1, ¶s 2-3; the device can be used with any sample desired).

In regards to claim 12, emitting further comprises detecting a first measure of power associated with the first wavelength (by 34; page 2, ¶ 13), providing a second measure of power proportional to the first measure of power (page 2, ¶s 15, 17), wherein the second measure of power is associated with the second wavelength (page 2, ¶ 15), and emitting the second wavelength at the second measure of power (pages 2-3, ¶s 18-19).

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, and 13-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison (US Pubs 2002/0190221).

In regards to claim 1, Hutchison discloses a system for providing a wavelength of light (fig. 1), comprising a light source system providing a first wavelength (26), and an optical assembly (20) that emits a second wavelength (page 2, ¶ 13) based at least in part upon the first wavelength (page 3, ¶ 19), wherein the second wavelength is not the result of a fluorescent emission (page 2, ¶ 13). The apparatus can be used with any fluorometer (page 1, ¶ 1), which would include a scanning fluorometer, which would include a scanner that would be part of the light source system.

In regards to claims 2-4, the first wavelength (from 26) corresponds to a wavelength capable of exciting one or more fluorescent molecules, which could be associated with a target molecule in a biological sample (page 1, ¶s 2-3; the device can be used with any sample desired).

In regards to claims 5, 14 and 19, the optical assembly (20) comprises a detector that detects a first measure of power associated with the first wavelength (34), a control unit that provides a second measure of power proportional to the first measure of power (46) wherein the second measure of power is associated with the second wavelength (page 2, ¶ 15), and a source that emits the second wavelength at the second measure of power (22).

In regards to claims 6 and 13, the instrument control application calibrates one or more detectors associated with the scanner (page 1, ¶s 1, and 7; the device is used for calibrating a fluorometer which

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would include calibrating the exciting light source system and the detectors associated with the light source system).

In regards to claim 7, the calibration includes a gain calibration (page 3, ¶s 23-30).

In regards to claims 15 and 17-18, the first wavelength (from 26) corresponds to a wavelength capable of exciting one or more fluorescent molecules, which could be associated with a target molecule in a biological sample (page 1, ¶s 2-3; the device can be used with any sample desired).

In regards to claim 16, the second wavelength is not the result of a fluorescent emission (page 2, ¶ 13).

In regards to claims 20 and 25-26, Hutchinson discloses a system and method for calibrating a scanner (fig. 1; as disclosed above this system can be used with any fluorometer, including a scanning fluorometer comprising a scanner), comprising a scanner that provides a first wavelength (26), an optical assembly (20) that comprises a first detector that detects a first measure of power associated with the first wavelength (34), a control unit that provides a second measure of power (46) proportional to the first measure of power, wherein the second measure of power is associated with a second wavelength (page 2, ¶ 15), a source that emits the second wavelength at the second measure of power (22), a second detector associated with the scanner (40), wherein the second detector generates a signal based, at least in part, upon the second wavelength and the second measure of power (page 2, ¶ 17), and an instrument control application that calibrates the second detector based, at least in part, upon the signal (page 3, ¶s 22-30).

In regards to claim 21, the second wavelength is not the result of a fluorescent emission (page 2, ¶ 13).

In regards to claims 22-23, the first wavelength (from 26) corresponds to a wavelength capable of exciting one or more fluorescent molecules, which could be associated with a target molecule in a biological sample (page 1, ¶s 2-3; the device can be used with any sample desired).

In regards to claim 24, the calibration includes a gain calibration (page 3, ¶s 23-30).

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*Additional Prior Art*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.  
Murtishaw et al. (USPN 6,638,127), and Dumas (US Pubs 2002/0139936).

Murthishaw discloses using a light emulating device to calibrate a measuring system.

Dumas discloses a type of scanning fluorometer.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kara E Geisel whose telephone number is 571 272 2416. The examiner can normally be reached on Monday through Friday, 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on 571 272 2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



F.L. Evans  
Primary Examiner  
Art Unit 2877

K.G.  
KEG  
June 19, 2006